

WHAT IS CLAIMED IS:

1. A method for the treatment of silicone emulsion waste, the method comprising the steps of:

adding base chemical material to the silicone emulsion waste in an amount effective to cause separating of the waste;

5 separating the silicone emulsion waste into a silicone oil laden liquid and an emulsion-free water; and

separating the silicone oil laden liquid and the emulsion-free water.

10 2. The method according to claim 1, wherein the step of adding chemical base material comprises mixing sodium hydroxide with the silicone emulsion waste.

3. The method according to claim 2, wherein sodium hydroxide is mixed with the silicone emulsion waste in an amount in a range from about 8 to about 12% sodium hydroxide.

15 4. The method according to claim 2, further comprising the step of heating the silicone emulsion waste prior to the step of adding base chemical material.

5. The method according to claim 4, wherein sodium hydroxide is mixed with the silicone emulsion waste in an amount in a range from about 3 to about 8% sodium hydroxide.

20 6. The method according to claim 2, wherein the step of adding chemical base material comprises adding sodium chloride with the sodium hydroxide.

7. The method according to claim 6, wherein the sodium chloride is added to the silicone emulsion waste in a larger amount than the sodium hydroxide.

8. The method according to claim 1, further comprising the step of heating the silicone emulsion waste prior to adding the base chemical material.

9. The method according to claim 8, wherein the step of adding the base material comprises mixing sodium carbonate with the silicone emulsion waste.

10. The method according to claim 9, wherein the sodium carbonate is mixed in an amount in a range from about 3 to about 10% sodium carbonate.

5 11. The method according to claim 7, wherein the step of adding the chemical base materials comprises adding sodium chloride with the sodium carbonate.

12. The method according to claim 11, wherein the sodium chloride is added to the silicone emulsion waste in a amount greater than the amount of sodium carbonate.

10 13. The method according to claim 12, wherein the silicone emulsion waste is heated to above 80°C.

14. The method according to claim 8, wherein the silicone emulsion waste is heated to at least 75 °C.

15 15. The method according to claim 1, further comprising the step of recycling the silicone oil laden liquid.

16. The method according to claim 1, further comprising the step of incinerating the silicone oil laden liquid.

17. The method according to claim 1, further comprising the step of treating the emulsion-free water at a waste water treatment plant.

20 18. The method according to claim 17, further comprising the step of recycling the emulsion-free water.

19. The method according to claim 18, further comprising the step of adding the recycled treated emulsion-free water to the silicone emulsion waste and chemical base material.

25 20. A system for the treatment of silicone emulsion waste comprising:

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a silicone emulsion waste reservoir;

at least one chemical tank containing chemicals for separating the silicone emulsion waste;

at least one mixing tank in communication with the silicone emulsion waste reservoir and the at least one chemical tank, wherein the silicone emulsion waste and chemicals are mixed in the mixing tank and the silicone emulsion waste is separated into a silicone oil laden liquid and an emulsion-free water;

a water tank that receives the emulsion-free water from the mixing tank; and

an oil tank which receives silicone oil liquid from the mixing tank.

21. The system of claim 20, wherein the oil tank is in communication with an incinerator for treatment of the silicone oil liquid.

22. The system of claim 20, wherein the water tank is in communication with a wastewater treatment plant for treating the emulsion-free water.